Figure 1

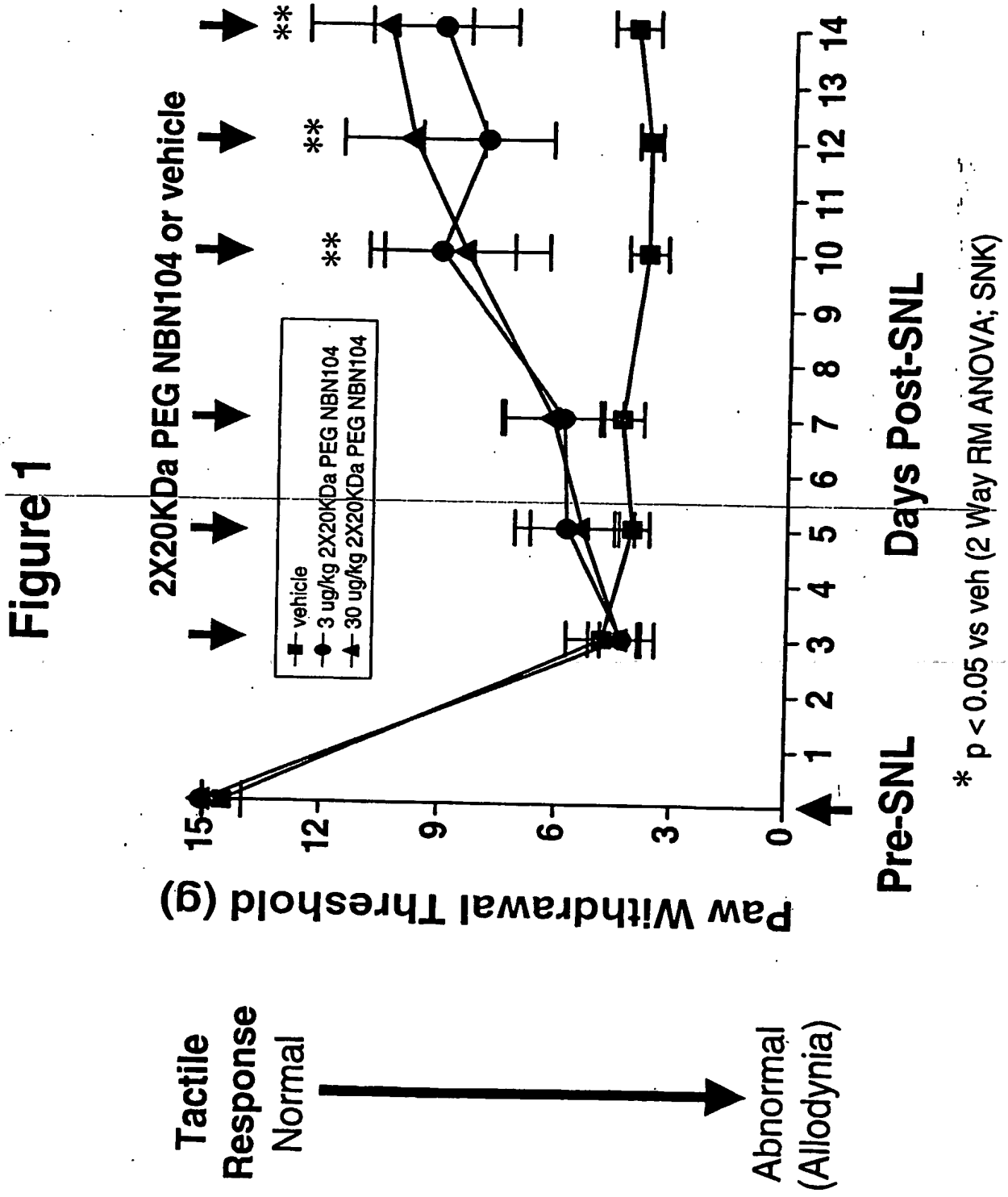
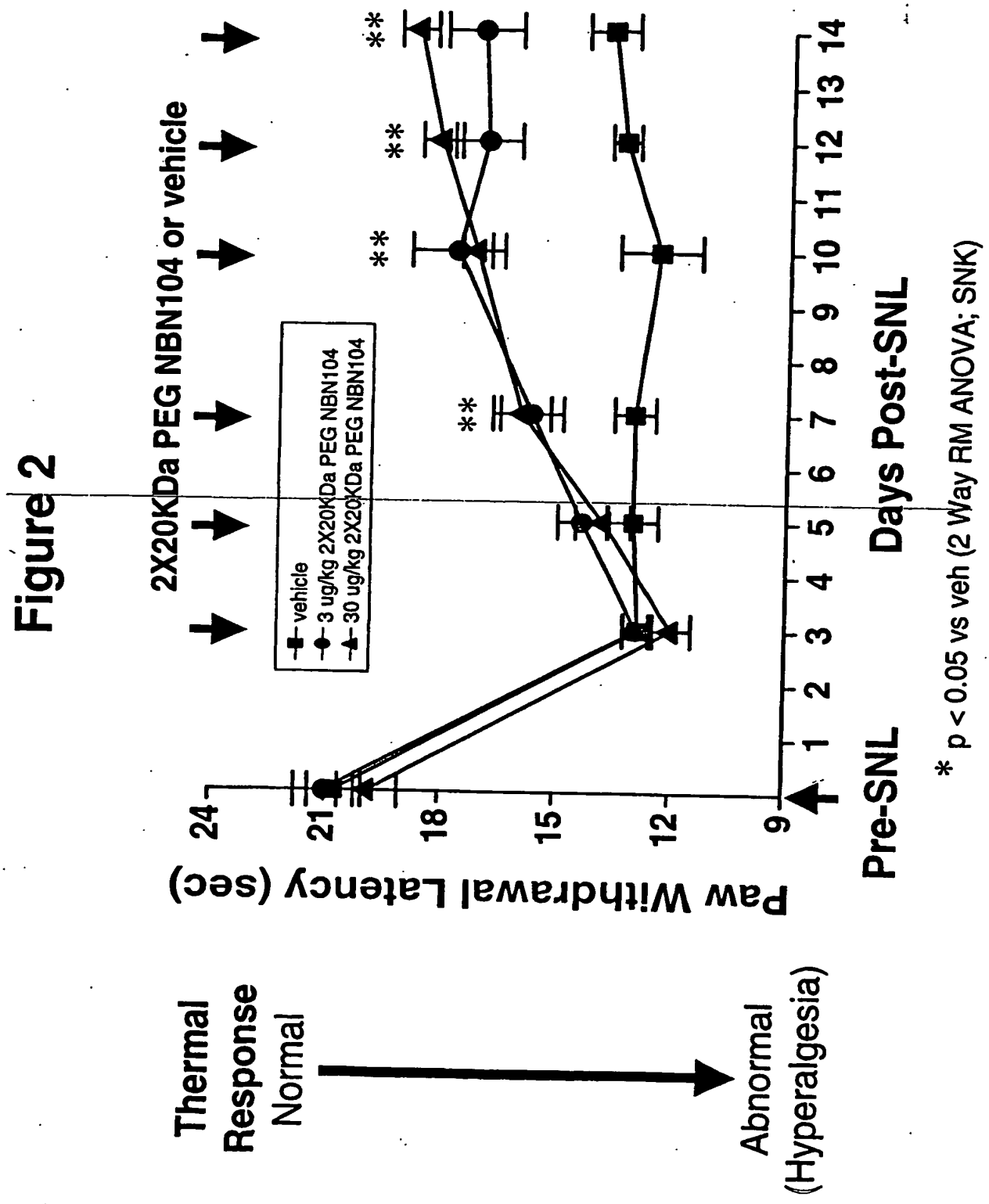

2X20KDa PEG NBN104 or vehicle
vehicle
3 ug/kg 2X20KDa PEG NBN104
30 ug/kg 2X20KDa PEG NBN104
**
**
**
Paw Withdrawal Threshold (g)
15
12
9
6
3
0
Pre-SNL
1 2 3 4 5 6 7 8 9 10 11 12 13 14
Days Post-SNL
Tactile Response
Normal
Abnormal (Allodynia)
* p < 0.05 vs veh (2 Way RM ANOVA; SNK)

Figure 2



* $p < 0.05$ vs veh (2 Way RM ANOVA; SNK)

FIG. 3

```
1     AGGPGSRARAAGARGCRLRSQLVPVRALGLGHRSDELVRF   human
      AGTRSSRARTTDARGCRLRSQLVPVSALGLGHSSDELIRF   mouse
      AGTRSSRARATDARGCRLRSQLVPVSALGLGHSSDELIRF   rat
      ||   ||||   |||||||||||||| |||||| |||| ||
      ag---srar---argcrlrsqlvpv-alglgh-sdel-rf   consensus

41    RFCSGSCRRARSPHDLSLASLLGAGALRPPPGSRPVSQPC   human
      RFCSGSCRRARSQHDLSLASLLGAGALRSPPGSRPISQPC   mouse
      RFCSGSCRRARSPHDLSLASLLGAGALRSPPGSRPISQPC   rat
      ||||||||||||||||||||||||||||||||||||||||
      rfcsgscrrars-hdlslasllgagalr-ppgsrp-sqpc   consensus

81    CRPTRYEAVSFMDVNSTWRTVDRLSATACGCLG          human (SEQ ID NO:2)
      CRPTRYEAVSFMDVNSTWRTVDHLSATACGCLG          mouse (SEQ ID NO:3)
      CRPTRYEAVSFMDVNSTWRTVDHLSATACGCLG          rat   (SEQ ID NO:4)
      |||||||||||||||||||| ||||||||||
      crptryeavsfmdvnstwrtvd-lsatacgclg          consensus (SEQ ID NO:1)
                    *                              * = Asn95
```

FIG. 4

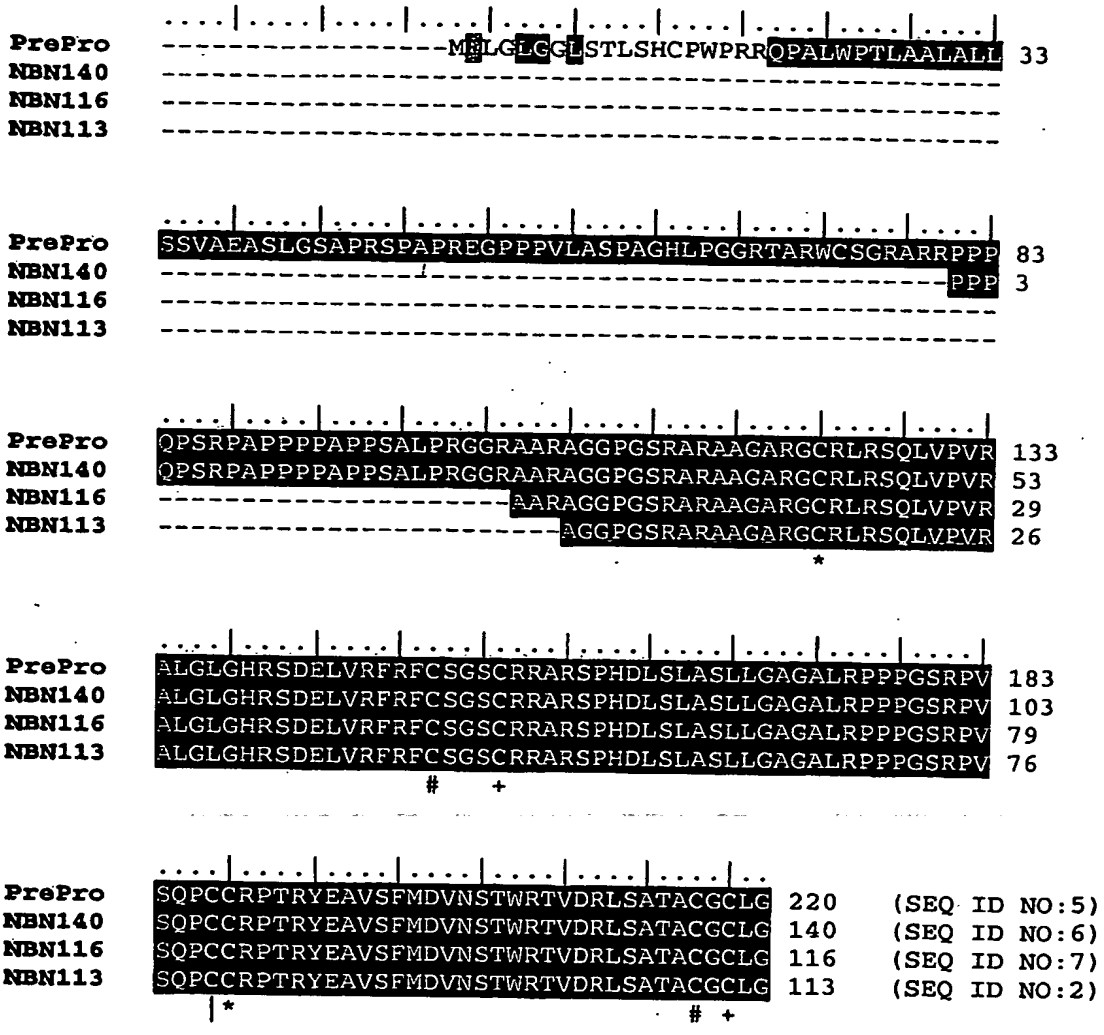
Consensus sequence: (SEQ ID NO:1)

Ala Gly Xaa1 Xaa2 Xaa3 Ser Arg Ala Arg Xaa4 Xaa5 Xaa6 Ala Arg Gly Cys Arg Leu Arg Ser Gln Leu Val Pro Val Xaa7 Ala Leu Gly Leu Gly His Xaa8 Ser Asp Glu Leu Xaa9 Arg Phe Arg Phe Cys Ser Gly Ser Cys Arg Arg Ala Arg Ser Xaa10 His Asp Leu Ser Leu Ala Ser Leu Leu Gly Ala Gly Ala Leu Arg Xaa11 Pro Pro Gly Ser Arg Pro Xaa12 Ser Gln Pro Cys Cys Arg Pro Thr Arg Tyr Glu Ala Val Ser Phe Met Asp Val Asn Ser Thr Trp Arg Thr Val Asp Xaa13 Leu Ser Ala Thr Ala Cys Gly Cys Leu Gly

wherein:

Xaa_1 is Gly or Thr	Xaa_6 is Gly or Asp	Xaa_{11} is Pro or Ser
Xaa_2 is Pro or Arg	Xaa_7 is Arg or Ser	Xaa_{12} is Val or Ile
Xaa_3 is Gly or Ser	Xaa_8 is Arg or Ser	Xaa_{13} is Arg or His
Xaa_4 is Ala or Thr	Xaa_9 is Val or Ile	
Xaa_5 is Ala or Thr	Xaa_{10} is Pro or Gln	

FIG. 5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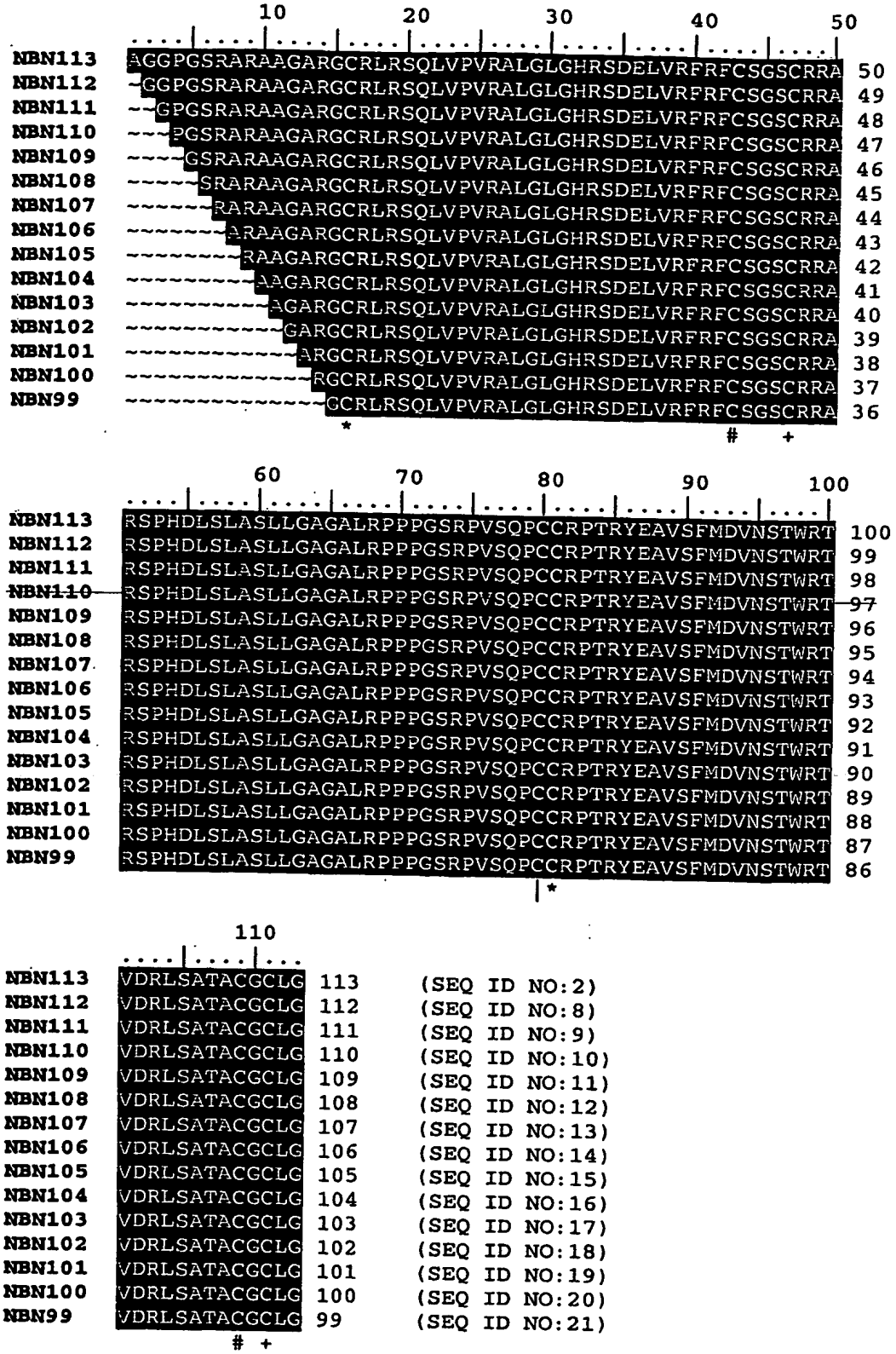
NBN140 ----------
NBN116 ----------
NBN113 ----------
PrePro SSVAEASLGSAPRSPAPREGPPPVLASPAGHLPGGRTARWCSGRARRPPP 83
NBN140 ----------PPP 3
NBN116 ----------
NBN113 ----------
PrePro QPSRPAPPPPAPPSALPRGGRAARAGGPGSRARAAGARGCRLRSQLVPVR 133
NBN140 QPSRPAPPPPAPPSALPRGGRAARAGGPGSRARAAGARGCRLRSQLVPVR 53
NBN116 ----------AARAGGPGSRARAAGARGCRLRSQLVPVR 29
NBN113 ----------AGGPGSRARAAGARGCRLRSQLVPVR 26
PrePro ALGLGHRSDELVRFRFCSGSCRRARSPHDLSLASLLGAGALRPPPGSRPV 183
NBN140 ALGLGHRSDELVRFRFCSGSCRRARSPHDLSLASLLGAGALRPPPGSRPV 103
NBN116 ALGLGHRSDELVRFRFCSGSCRRARSPHDLSLASLLGAGALRPPPGSRPV 79
NBN113 ALGLGHRSDELVRFRFCSGSCRRARSPHDLSLASLLGAGALRPPPGSRPV 76
PrePro SQPCCRPTRYEAVSFMDVNSTWRTVDRLSATACGCLG 220 (SEQ ID NO:5)
NBN140 SQPCCRPTRYEAVSFMDVNSTWRTVDRLSATACGCLG 140 (SEQ ID NO:6)
NBN116 SQPCCRPTRYEAVSFMDVNSTWRTVDRLSATACGCLG 116 (SEQ ID NO:7)
NBN113 SQPCCRPTRYEAVSFMDVNSTWRTVDRLSATACGCLG 113 (SEQ ID NO:2)

FIG. 6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NBN112 -GGPGSRARAAGARGCRLRSQLVPVRALGLGHRSDELVRFRFCSGSCRRA 49
NBN111 --GPGSRARAAGARGCRLRSQLVPVRALGLGHRSDELVRFRFCSGSCRRA 48
NBN110 ---PGSRARAAGARGCRLRSQLVPVRALGLGHRSDELVRFRFCSGSCRRA 47
NBN109 ----GSRARAAGARGCRLRSQLVPVRALGLGHRSDELVRFRFCSGSCRRA 46
NBN108 -----SRARAAGARGCRLRSQLVPVRALGLGHRSDELVRFRFCSGSCRRA 45
NBN107 ------RARAAGARGCRLRSQLVPVRALGLGHRSDELVRFRFCSGSCRRA 44
NBN106 -------ARAAGARGCRLRSQLVPVRALGLGHRSDELVRFRFCSGSCRRA 43
NBN105 --------RAAGARGCRLRSQLVPVRALGLGHRSDELVRFRFCSGSCRRA 42
NBN104 ---------AAGARGCRLRSQLVPVRALGLGHRSDELVRFRFCSGSCRRA 41
NBN103 ----------AGARGCRLRSQLVPVRALGLGHRSDELVRFRFCSGSCRRA 40
NBN102 -----------GARGCRLRSQLVPVRALGLGHRSDELVRFRFCSGSCRRA 39
NBN101 ------------ARGCRLRSQLVPVRALGLGHRSDELVRFRFCSGSCRRA 38
NBN100 -------------RGCRLRSQLVPVRALGLGHRSDELVRFRFCSGSCRRA 37
NBN99 --------------GCRLRSQLVPVRALGLGHRSDELVRFRFCSGSCRRA 36
* # +
60 70 80 90 100
NBN113 RSPHDLSLASLLGAGALRPPPGSRPVSQPCCRPTRYEAVSFMDVNSTWRT 100
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NBN99 RSPHDLSLASLLGAGALRPPPGSRPVSQPCCRPTRYEAVSFMDVNSTWRT 86
*
110
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NBN112 VDRLSATACGCLG 112 (SEQ ID NO:8)
NBN111 VDRLSATACGCLG 111 (SEQ ID NO:9)
NBN110 VDRLSATACGCLG 110 (SEQ ID NO:10)
NBN109 VDRLSATACGCLG 109 (SEQ ID NO:11)
NBN108 VDRLSATACGCLG 108 (SEQ ID NO:12)
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NBN100 VDRLSATACGCLG 100 (SEQ ID NO:20)
NBN99 VDRLSATACGCLG 99 (SEQ ID NO:21)
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